

## The Centre for Blood Research VIRTUAL SEMINAR SERIES

Wednesday, October 14, 2020 11:00am - 12:00pm PST



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"Platelet Procoagulant Membrane Dynamics Study: Mechanistic Insights and Clinical Translation."

Platelets play multifaceted roles in thrombosis and haemostasis, rapidly adhering to sub-endothelial structures and to each other to generate platelet aggregates or primary haemostatic plugs which is stabilised by the local production of thrombin and subsequently fibrin. Critical to this response is the surface exposure of internal aminophospholipids, particularly phosphatidylserine, which provides the catalytic sites for the localised assembly of tenase and the prothrombinase complexes, which in turn, promotes thrombin generation on the platelet surface and the amplification of the clotting process by at least 1000-fold. In this seminar, the spatiotemporal dynamics, and drivers of the dramatic transformation platelets undergo during thrombosis and haemostasis are examined; and the translational values of platelet procoagulant membrane dynamics analysis are highlighted.





